

Buffalo Creek (0214B) Recreational Use Attainability Analysis Summary and Recommendation

A recreational use-attainability analysis (RUAA) was conducted on Buffalo Creek (0214B) in the summer of 2013 to determine the appropriate recreational use and numeric criteria. Buffalo Creek is an unclassified intermittent with pools water body that is approximately 34 miles in length. The creek is located in Wichita County. It was identified in the 2014 Texas Clean Water Act Section 303(d) List of Impaired Water Bodies due to elevated bacteria levels. It was initially listed in 2010.

The RUAA identified that the presumed use of primary contact recreation (PCR) for Buffalo Creek should be revised to secondary contact recreation 1 (SCR 1). SCR applies to water bodies where water recreation can occur, but the nature of the recreation does not involve a significant risk of ingestion. SCR 1 applies to intermittent and perennial freshwaters where site-specific information demonstrates that primary contact recreation has little to no likelihood of occurring due to physical characteristics of the water body such as shallow depths or lack of pools.

During the field surveys, field staff did not observe any form of recreation occurring on the stream. Interviews with stakeholders and landowners indicated that those people have never personally used or witnessed PCR on the stream. Fishing and hunting were the most common activities documented from interviews and were reported as personal use, observed use, and hearsay. Buffalo Creek had an average thalweg of 0.14 meters (5.51 inches) and lacked pools deeper than 1 meter. Stream flow was low to normal during both surveys. The stream was experiencing extreme to moderate drought conditions during the time of the surveys. Public access is available at 6 of 11 survey sites via bridge crossings. There are no public parks on the creek. Access into the stream is overall moderately difficult due to steep banks and dense vegetation.

Naturally low water levels decrease the likelihood of PCR use. Buffalo Creek has a shallow average depth and no accounts of PCR, supporting reclassification to SCR1. In accordance with §307.4 (j)(3)(C) of the Texas Surface Water Quality Standards, the TCEQ recommends a reclassification from PCR to SCR1 with the corresponding geometric mean of 630 colonies *E. coli*/100mL for all of Buffalo Creek, from the confluence of the Wichita River west of Wichita Falls in Wichita County to the upstream perennial portion of the stream east of Electra in Wichita County. This reclassification is appropriate due to “natural, ephemeral, intermittent low flow conditions or water levels” in accordance with reasons specified in 40 CFR §131.10(g)(2).

Prior to changing the currently assigned recreational use of Buffalo Creek in the Texas Surface Water Quality Standards, the TCEQ would provide additional public notice and opportunity for public comment. In addition, the U.S. Environmental Protection Agency would review this proposed change under the provisions of the federal Clean Water Act.